clarion

Owner's manual / Mode d'emploi
Bedienungsanleitung / Istruzioni per l'uso
Gebruiksaanwijzing / Manual de instrucciones
Bruksanvisning

ARX9470R
ARX9470RW

RDS-EON/FM-MPX/MW/LW RADIO CASSETTE COMBINATION WITH CD CHANGER CONTROL

•

COMBINÉ RADIO-CASSETTE RDS-EON/FM-MPX/PO/GO AVEC CONTRÔLEUR DE CHANGEUR CD

•

RDS-EON/UKW-MPX/MW/LW-RADIO-KASSETTEN-KOMBINATION MIT CD-WECHSLER-STEUERUNG

•

SINTOLETTORE A CASSETTA/RADIO RDS-EON/FM-MPX/MW/LW CON CONTROLLO DEL CARICATORE CD

•

RDS-EON/FM-MPX/MW/LW TUNER MET CASSETTESPELER EN BEDIENINGSEENHEID VOOR CD-WISSELAAR

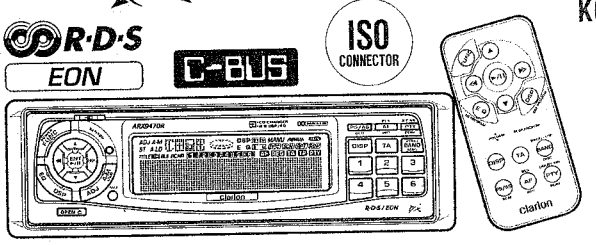
•

COMBINACIÓN DE RADIOCASETE DE RDS-EON/FM-MPX/MW/LW CON CONTROL DE CAMBIADOR DE DISCOS COMPACTOS

•

KOMBINERAD RDS-EON/FM-MPX/MV/LV-RADIO OCH KASSETTSPELARE MED CD-VÄXLARKONTROLL

ALPHA
R·D·S
EON
C-BUS
ISO CONNECTOR



Thank you for purchasing the **Clarion ARX9470R/ARX9470RW**.

* This owner's manual is for both the ARX9470R and the ARX9470RW. The only difference between these models is the colour of the front panel. The operating methods are the same.
* Please read this owner's manual in its entirety before operating this equipment.
* After reading this manual, be sure to keep it in a handy place (e.g., glove compartment).
* Check the contents of the enclosed warranty card and keep it carefully with this manual.
* This manual includes the operating procedures of the CD changer that is connected via the C-BUS cable, of the Digital Sound Processor (DSP) and of the Equalizer (EQ). The CD changer, DSP or Equalizer has its own owner's manual, but no explanations for operating it are described.

English

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1. PRECAUTIONS

INFORMATION FOR USERS:

1. **CHANGES OR MODIFICATIONS TO THIS PRODUCT NOT APPROVED BY THE MANUFACTURER WILL VOID THE WARRANTY.**
2. Clean the head periodically by playing a cleaning cassette in the player.

   Avoid touching the head with magnetic or hard objects.
3. Do not oil the cassette mechanism.
4. Always remove the cassette from the mechanism when not in use. Exposure to direct sunlight, extreme temperatures or high humidity may damage cassettes.

CASSETTE PRECAUTIONS:

1. Tape slack can lead to operating difficulties. Remove tape slack before inserting a cassette, particularly when using C-90 or prerecorded cassettes.
2. Avoid use of C-120 or longer cassettes (The very thin tape may stretch or break.)

2. DCP

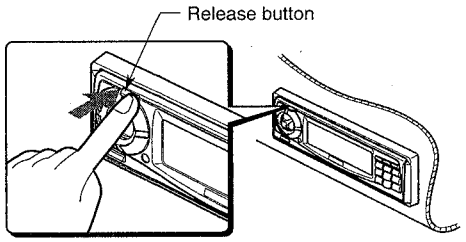
* The DETACHABLE CONTROL PANEL is called "DCP" in this owner's manual.

The control panel can be detached to prevent theft. When detaching the control panel, store it in the DCP case to prevent scratches.

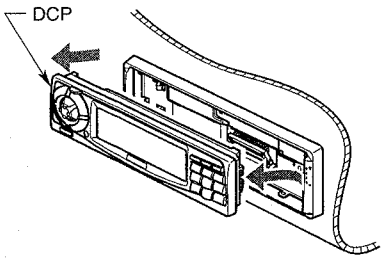
We recommend taking the DCP with you when leaving the car.

Removing the DCP

1. Turn off the power with the SLOPING CONSOLE closed.
2. Deeply push in the Release button and open the DCP.



3. Pull the DCP toward you and remove it.

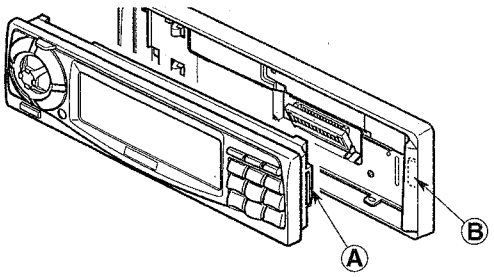


⚠CAUTION

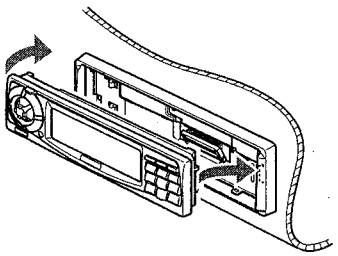
- **Be sure to close the SLOPING CONSOLE before removing the DCP.**
- **Removing the DCP with the SLOPING CONSOLE open will cause it to close too quickly.**

Attaching the DCP

1. Insert so that the Ⓐ part on the right side of the DCP engages into the tab Ⓑ on the main unit.



2. Press the left side of the DCP gently to snap it into place.

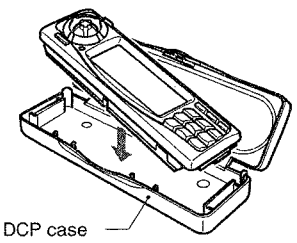


⚠CAUTION

- **The DCP can easily be damaged by shocks. After removing it, be careful not to drop it or subject it to strong shocks.**
- **If the release button is pressd and the DCP is disengaged from the lock, it may drop due to vibration of the car.**

  After you have removed the DCP, attach it to the main unit or store it in the DCP case to prevent it from being damaged.

  (See figure below.)



- **The connector connecting the main unit and the DCP is an extremely important part. Be careful not to damage it by pressing on it with fingernails, screwdrivers, etc.**

Note:

- *If the DCP is dirty, wipe off the dirt with a soft, dry cloth only.*

English

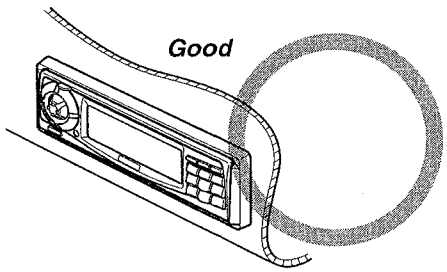
3. SLOPING CONSOLE

The ARX9470R and the ARX9470RW use a sloping console structure that makes possible large-size displays.

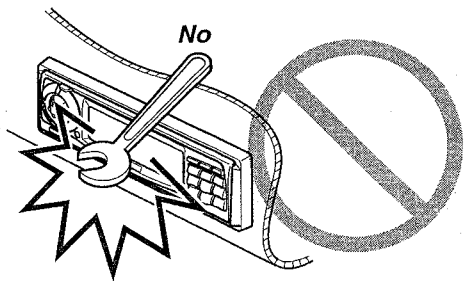
⚠ CAUTION

When opening and closing the SLOPING CONSOLE, be careful not to catch your fingers. They could be injured.

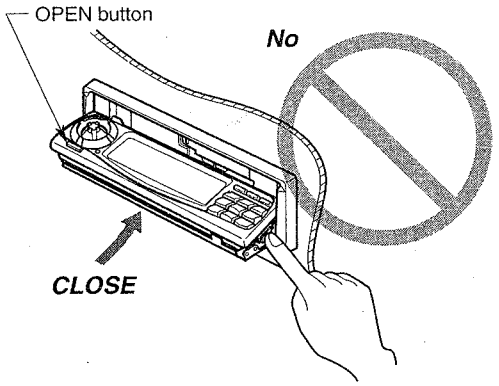
1. Always use the ARX9470R and the ARX9470RW with the SLOPING CONSOLE closed.



2. Do not force operations or use this device abnormally when opening or closing the SLOPING CONSOLE.
3. When closing the SLOPING CONSOLE, do not press the OPEN button.
4. Strong impacts to the operating or display section can cause damage or deformation.



5. The SLOPING CONSOLE has been designed to close automatically. When it does, be careful not to get your fingers and any foreign matter caught in the SLOPING CONSOLE.



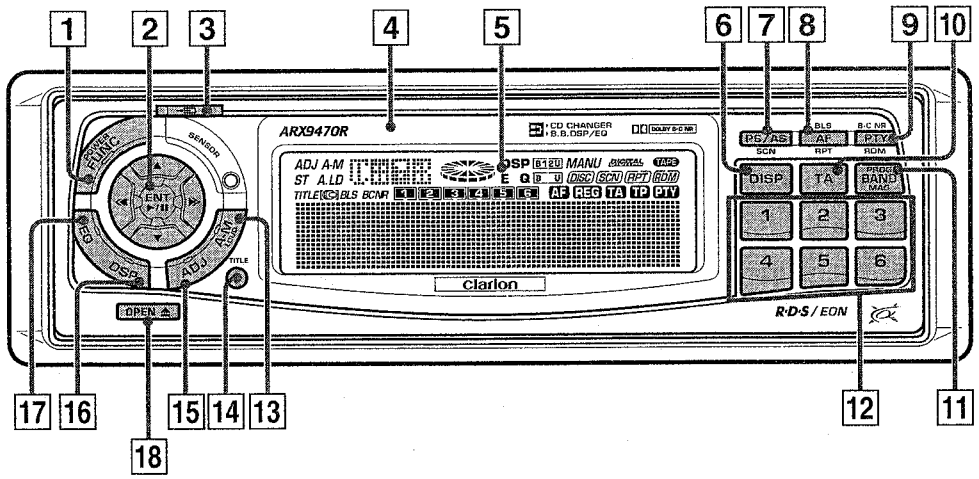
When your fingers, or any foreign matter, obstruct the closing of the SLOPING CONSOLE, the safety mechanism stops the closing. To open the SLOPING CONSOLE again, remove the obstruction and press the OPEN button.

English

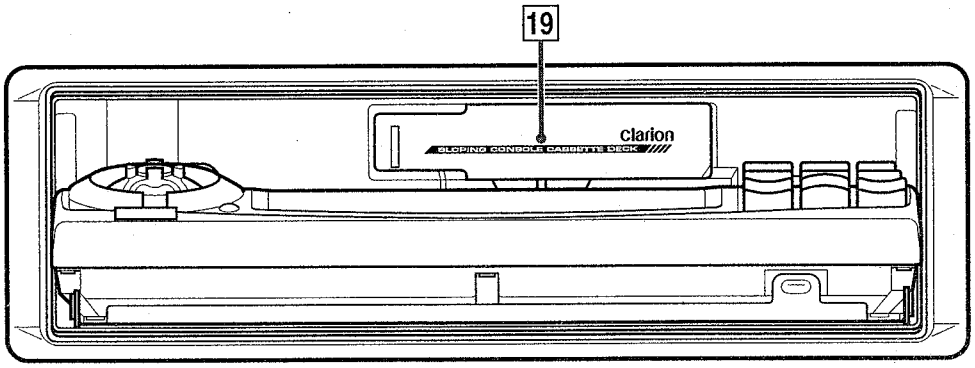
Be sure to unfold and read the next page. / Veuillez déplier et vous référer à la page suivante.
Bitte ausbreiten und die nächste Seite lesen. / Assicurarsi di aprire e leggere la pagina successiva.
Volgende pagina uitvouwen en doorlezen a.u.b. / Cerciórese de desplegar y de leer la página siguiente.
Glöm inte att vika ut och läsa nästa sida.

4. CONTROLS / LES COMMANDES / REGLER / CONTROLLI REGELAARS / CONTROLES / KONTROLLER

***Main unit** / Appareil principal / **Hauptgerät** / Apparecchio principale*
Hoofdtoestel** / Unidad principal / **Huvudenhet



***With the SLOPING CONSOLE opened** / Ouvrez le PANNEAU RABATTABLE*
***ÖFFNUNG DER KLAPPSCHALTTAFEL** / Apertura del PANNELLO APRIBILE*
***Met het NEERKLAPBARE PANEEL geopend** / Apertura del PANEL ABATIBLE*
DEN NEDFÄLLBARA PANELEN öppen



English
Français
Deutsch
Italiano
Nederlands
Español
Svenska

***Note:** Be sure to unfold this page and refer to the front diagrams as you read each chapter.*
***Remarque:** Veuillez déplier cette page et vous référer aux schémas quand vous lisez chaque chapitre.*
***Hinweis:** Bitte diese Seite ausfalten und beim Lesen der einzelnen Kapitel die Frontdiagramme beachten.*
***Nota:** Assicurarsi di aprire questa pagina e fare riferimento a questi diagrammi quando si legge ciascun capitolo.*
***Opmerking:** Vouw deze pagina uit en zie tevens de afbeeldingen van het voorpaneel tijdens het doorlezen van de volgende hoofdstukken.*
***Nota:** Cuando lea los capítulos, despliegue esta página y consulte los diagramas.*
***Observera:** Vik ut denna sida för att kunna se figurerna över bilstereons framsida medan du läser de olika kapitlen.*

5. BUTTON TERMINOLOGY

Note:

*• Be sure to read this chapter referring to the front diagrams of chapter "**4. CONTROLS**" on page 5 (unfold).*

Names of Buttons

English

1 POWER button
FUNC (function) button

2 **α-selector (ALPHA-TOUCH CONTROLLER)**

3 Release button

4 **DCP/SLOPING CONSOLE**

5 **Display**

6 DISP (display) button

7 PS/AS (preset scan/auto store) button ..... [📻]
SCN (scan) button ..... [📼], [💿]

8 AF (alternative frequencies) button ..... [📻]
BLS (blank skip) button ..... [📼]
RPT (repeat) button ..... [📼], [💿]

9 PTY (programme type) button ..... [📻]
Dolby NR button (B·C NR) ..... [📼]
RDM (random) button ..... [💿]

10 TA (traffic announcement) button ..... [📻]

11 BAND button ..... [📻]
PROG (programme) button ..... [📼]
MAG (magazine) button ..... [💿]

12 Preset buttons (1 to 6) ..... [📻]
Direct buttons (1 to 6) ..... [💿]

13 A-M (audio mode) button
LOUD (loudness) button

14 TITLE button ..... [💿]

15 ADJ (adjust) button

16 DSP (digital sound processor) button

17 EQ (equalizer) button

18 OPEN/Eject button ..... [📼]

19 Cassette insertion slot ..... [📼]

[📻]: In the radio (RDS) mode
[📼]: In the tape mode
[💿]: In the CD changer mode

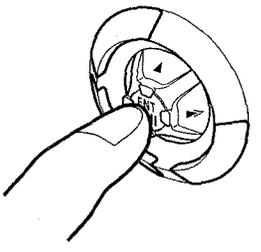
α-Selector Operation (ALPHA-TOUCH CONTROLLER)

* The ALPHA-TOUCH CONTROLLER is called "**α-selector**" in this owner's manual.

The α-selector enables you to operate main functions of each mode with a single finger.

Read through the operating procedures of the α-selector first and then read the operating explanations for each mode.

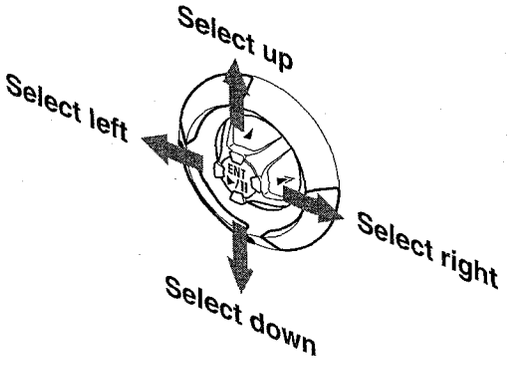
1. Put your index finger on the α-selector.



2. To select the up/down direction (▲, ▼) or the left/right direction (◀◀, ▶▶), move the α-selector to the corresponding direction.

This α-selector's operation is mainly used when operating the below.

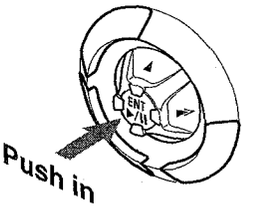
- Adjusting the volume
- Selection of radio stations
- Tune selection of a tape or CD changer
- Item selection of each setting



3. To select the centre (ENT ▶/II), push in the α-selector to the centre.

This α-selector's operation is mainly used when operating the below.

- Mute operation in radio mode
- Play/pause operation of a tape or CD changer
- Decision operation of each setting item



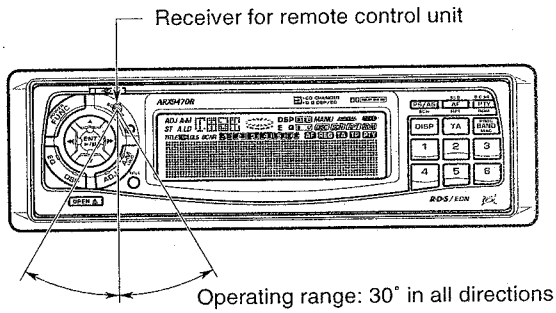
Note:

- *If you try to rotate the α-selector forcibly or apply more than needed strength to it, this results in damage or breakdown.*

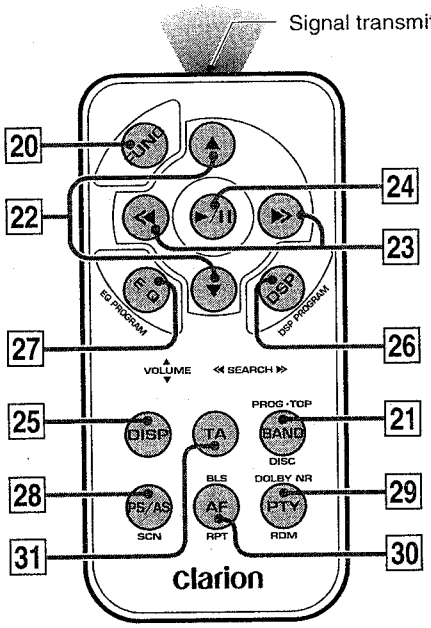
English

6. REMOTE CONTROL

English

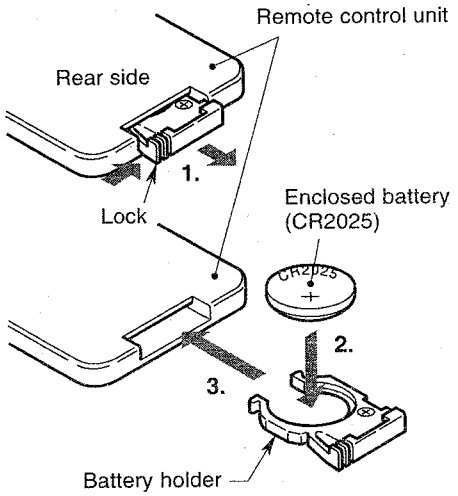


Remote control unit



Inserting the Battery

1. Turn the remote control unit upside down, push the lock in the direction of the arrow, and pull out the battery holder.
2. Insert the enclosed battery (CR2025) with the "+" side facing up.
3. Push the battery holder back in securely until a click is heard.



Notes:

Using batteries improperly can cause them to explode. Take note of the following points:

- *When replacing the battery, be sure to set the new battery with the "+" side facing up.*
- *Do not short-circuit, disassemble or heat batteries.*
- *Do not dispose of batteries in flames.*
- *Dispose of spent batteries in the proper place.*

Functions of Remote Control Unit Buttons

Mode / Button	Radio (RDS)	Tape	CD changer
20 FUNC	Switches between radio, tape and CD changer.		
21 BAND PROG DISC	Switches reception band.	Switches the side of the tape.	Moves the next disc in increasing order.
22 VOLUME (▼▲)	Increases and decreases volume (in all modes).		
23 SEARCH (◀◀ ▶▶)	Moves preset channels up and down.	Fast-forwards and rewinds tape. APC fast-forward and rewind.	Moves tracks up and down. When pressed and held for 1 second: Fast-forward/fast-backward.
24 ▶/II	Turns mute on and off.	Switches between playback and pause.	Switches between playback and pause.
25 DISP	Switches between main display, sub display, character display and clock (CT) display.		
26 DSP PROGRAM	Moves the DSP programme up (in all modes).		
27 EQ PROGRAM	Moves the equalizer programme up (in all modes).		
28 PS/AS SCAN	Preset scan. When pressed and held for 2 seconds: Auto store.	Fast-forward scan.	Scan play. When pressed and held for 2 seconds: Disc scan play.
29 PTY DOLBY NR RDM	PTY standby mode on and off.	Selects Dolby Noise Reduction mode.	Random play. When pressed and held for 2 seconds: Disc random play.
30 AF RPT BLS	AF function on and off. When pressed and held for 2 seconds: REG function on and off.	Repeat play. When pressed and held for 2 seconds: Blank skip function turns on and off.	Repeat play. When pressed and held for 2 seconds: Disc repeat play.
31 TA	TA on/off (in all modes).		

* Some of the corresponding buttons on the main unit and remote control unit have different functions.

English

English

7. OPERATION

Basic Operations

*Note: Be sure to read this chapter referring to the front diagrams of chapter "**4. CONTROLS**" on page 5 (unfold).*

⚠CAUTION

Be sure to set the volume to the minimum level before turning off the power to the unit. Loud sounds when turning on the power may impair your hearings or cause damage to the unit.

Turning on the power

Note:

- *Be sure to start the engine before using the unit to prevent the battery from running down.*

1. Press POWER button [1].
2. The illumination and display on the unit light up. The unit starts in the function mode it was in when the power was turned off last.
3. Press and hold POWER button [1] for 1 second or longer to turn off the power.

Selecting a mode

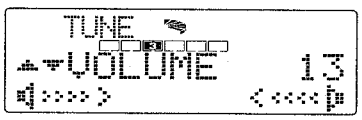
1. Press FUNC button [1] to select a function mode.
2. The function mode changes in the following order:

   Radio ➜ Tape ➜ CD changer ➜ Radio ...

   * If the CD changer is not connected, the CD changer mode cannot be selected.

Adjusting the volume

Select up or down to increase or decrease using α-selector [2].



* Selecting up or down and holding for 1 second or longer on the α-selector [2] continuously increases or decreases the volume respectively.
* The volume level (step 0 to 33) appears in the display.

Adjusting audio mode (use α-selector)

Press A-M button [13] to select an item to be adjusted.

Each time you press the button, the item changes in the following order:

Bass/Treble ➜ Balance/Fader ➜ Mode display...

* The display returns to the previous mode 7 seconds after the adjustment.

Adjusting the tone

Select "**BASS/TREB**" (bass/treble) in the display.

●BASS adjustment (step –6 to +6)

Select right or left to increase or decrease.

●TREBLE adjustment (step –6 to +6)

Select up or down to increase or decrease.

Note:

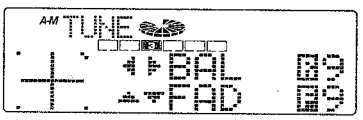
- *When the expand DSP (Digital Sound Processor) or EQ (Equalizer), sold separately, is connected to the unit, the tone adjustment mode cannot be selected. To adjust the tone, see the section **"DSP and Equalizer Operations"**.*

Adjusting the balance (step L9 to R9)

1. Select "**BAL/FAD**" (balance/fader) adjustment in the display.
2. Select right or left to balance the right or left sound level.

Adjusting the fader (step F9 to R9)

1. Select "**BAL/FAD**" (balance/fader) adjustment.
2. Select up or down to balance the sound toward the front or rear of the vehicle.



Loudness

The loudness effect emphasizes the bass and treble to create a natural sound tone.

When you are listening to music at a low volume, it is recommended to use the loudness effect.

●Turning on and off the Loudness Effect

Pressing and holding LOUD button [13] for 2 seconds or longer turns the loudness effect on and off. When the loudness effect is turned on, "**LD**" appears in the display.

When the DPH9100/DPH9300 are connected, the Auto Loudness effect (high grade type) becomes available instead of the loudness effect (ordinary type).

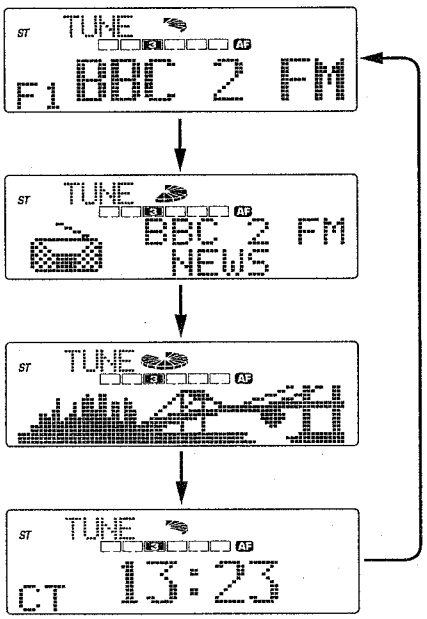
For further detail of the Auto Loudness, see the subsection "**Turning the auto loudness function on and off**".

Switching display

Press DISP button [6] to select the display.

Each time you press the button, the display switches in the following order:

Main➜Sub➜Character➜Clock (CT)➜Main ...



* If the display is changed by other button operation when the clock (CT) is displayed, the clock display returns automatically after the operation.
* The example shows the display in radio mode.

When you have entered a CD's title, it appears in the Sub-display. If not, "------" appears in the Sub-display instead. For entering a title, see the subsection "**Entering titles**".

When no CT data is received, "CT--:--" appears in the display.

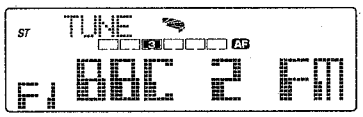
Switching the character display

Press and hold DISP button [6] for 1 second or longer in the character display mode.

* There are 10 characters available.

Changing the display characters

While you press and hold DSP button [16], press DISP button [6]. The display characters are switched over.

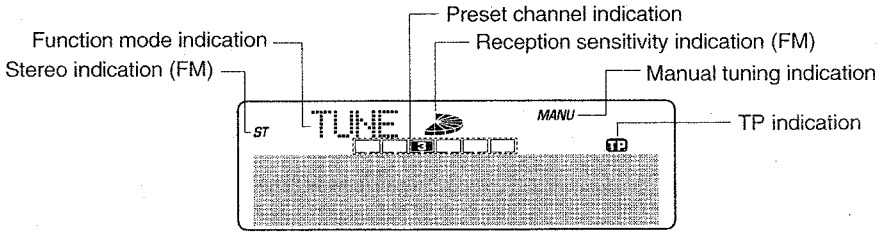


* Among display characters, you can only change alphabetical letters and figures.

English

Radio Operations

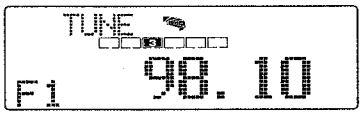
Radio mode



English

Listening to the radio

1. Press FUNC button [1] to select radio mode. The frequency or PS appears in the display.
   * PS: Programme Service Name



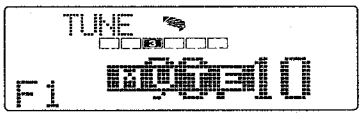
2. Press BAND button [11] to select a band. The band changes in the following order:
   FM1 ➜ FM2 ➜ FM3 ➜ AM (MW/LW) ➜ FM1 ...
3. Select left or right to tune in to a desired station using α-selector [2].

Mute

Push in α-selector [2] to mute the sound.

"**MUTE**" appears in the display.

Push in α-selector [2] again to return to the previous sound level.



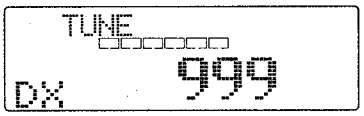
Tuning

Three tuning modes are available: seek tuning, manual tuning and preset tuning.

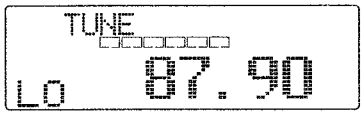
Seek tuning

Two seek tuning modes are available: DX SEEK for all stations, and LOCAL SEEK for stations with strong signal.

1. Press BAND button [11] to select a band.
2. When "**MANU**" is not lit in the display, seek tuning is available.
   If "**MANU**" is lit in the display, press and hold BAND button [11] for 2 seconds or longer to turn it off.
3. DX SEEK
   Select left or right to tune in to automatically a station using α-selector [2].
   While selecting left or right, the station is sought in the direction of higher or lower frequency channel.
   When a station is being sought for, "**DX**" appears in the display.



4. LOCAL SEEK
   Press left or right and hold α-selector [2] for 1 second or longer to activate LOCAL SEEK tuning. When a station with good reception is found, it is automatically tuned in.
   When a station is being sought for, "**LO**" appears in the display.



Manual tuning

There are two ways available: quick tuning and step tuning.

While you are in step tuning mode, the channel is sought for step by step; while you are in quick tuning mode, the channel is rapidly sought for.

1. Press BAND button [11] to select a band.
2. When "**MANU**" is lit in the display, manual tuning is available.

   If "**MANU**" is not lit in the display, press and hold BAND button [11] for 2 seconds or longer to light it up.
3. Tune in to a station.

● Quick tuning:

Press left or right and hold α-selector [2] for 1 second or longer.

● Step tuning:

Press left or right.

* "**MANU**" disappears from the display 7 seconds after manual tuning, and seek tuning becomes available.

Recalling a preset station

Preset tuning is a function for storing stations to Preset buttons (1 to 6) which enables you to select a station by pressing the corresponding preset button.

1. Press BAND button [11] to select a band.
2. Press one of Preset buttons [12] to select a stored station.

Note:

- *Press and hold Preset button [12] for 2 seconds or longer to store the station currently being received (preset memory).*

Manual memory

Up to 24 stations (6 each for the FM1, FM2, FM3 and AM (MW/LW) stations) can be preset in the Preset buttons.

1. Press BAND button [11] to select a band.
2. Select left or right to tune in to a desired station using α-selector [2].
3. Press and hold one of Preset buttons [12] for 2 seconds or longer to store the station currently being received.

Auto store

Auto store is a function for storing up to 6 stations that are automatically tuned in sequentially.

Notes:

- *The only FM band that can store stations is FM3. If you try to store stations in FM1 or FM2, the stations will automatically be stored in FM3.*
- *When the auto store is performed, the station previously stored in the memory at that position is overwritten.*
- *If there are fewer than 6 stations with good reception, the stations previously stored at the remaining Preset buttons are not overwritten.*
- *A station already stored in one of Preset buttons cannot be stored in another Preset buttons.*

1. Press BAND button [11] to select a band (FM3 or AM) of the desired station.
2. Press and hold AS button [7] for 2 seconds or longer. The stations with good reception are stored automatically to Preset buttons [12].

Preset scan

This function scans through each preset station for 7 seconds sequentially.

This is useful when you want to search for a desired station.

Note:

- *Take note that if you press and hold PS button [7] for 2 seconds or longer, the auto store function goes into effect and the unit starts storing stations.*

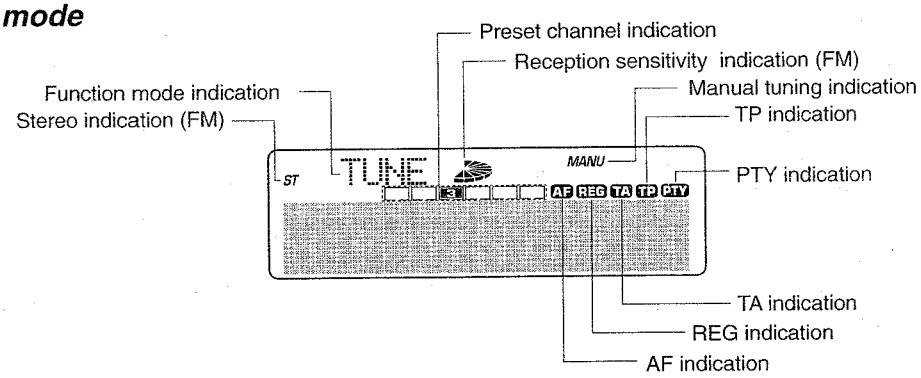
1. Press PS button [7].
2. When a station that you want to listen to is tuned in, press PS button [7] again or the corresponding Preset button [12] to stop preset scan.

   * A station that cannot be tuned in to is skipped and the next preset station is tuned in.

English

RDS Operations

RDS mode



RDS (Radio Data System)

This unit incorporates an RDS system decoder for use with stations broadcasting RDS data.

This system enables the radio to display the name of the station being received (PS), and also to automatically switch to a better frequency when one is available while you are traveling great distances (AF switching).

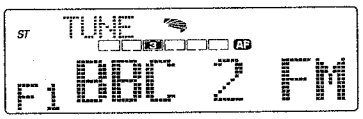
It can also interrupt a CD or tape with traffic information or the programme type broadcast by an RDS station.

Additionally, if EON information is received, this information enables automatic switching of other preset stations on the same network and interruption of the station being received with traffic information from other stations (TP). This function may not work in some regions.

To use the RDS function, be sure to set the radio to FM mode.

- **AF**: Alternative Frequencies
- **PS**: Programme Service Name
- **PTY**: Programme Type
- **EON**: Enhanced Other Network
- **TP**: Traffic Programme

* If an RDS station can no longer be received clearly (at the current location), "**AF**" flashes in the display. When reception is restored, "**AF**" stops flashing.



AF function

The AF function enables the unit to maintain optimum reception by switching to different frequencies on the same network.

* The factory setting is "**on**".

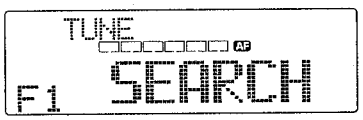
●Turning AF function off

When "**AF**" is lit or flashing in the display, press AF button [8]. "**AF**" in the display goes off and AF turns off.

●Turning AF function on

When "**AF**" is not lit in the display, press AF button [8] again. "**AF**" lights in the display and AF turns on.

If the receiving condition of a station being tuned is getting worse, "**AF**" starts flashing and the unit tries to switch to an alternative frequency. If switching cannot be performed, the display switches to "**SEARCH**" and the unit searches for the same programme.



REG (Regional Programme) function

When REG function is on, regional station reception is optimized.

If this function is off, the unit switches in to the regional station in the next local area when you enter the next area while receiving the regional station in the previous local area.

* The factory setting is "**off**".

Notes:

- *This function is ineffective when a national station such as BBC 2 FM is being received.*
- *The on/off setting of REG is effective when AF is on.*

●Turning REG function on

When "**REG**" is not lit in the display, pressing and holding AF button [8] for 2 seconds or longer. "**REG**" lights in the display.

●Turning REG function off

Pressing and holding AF button [8] for 2 seconds or longer again. "**REG**" in the display goes off.

Manual tuning of related regional stations

1. This function works when AF is on and REG is off.

Note:

- *This function is effective when related regional stations are received.*

2. Press one of the Preset buttons [12] to recall a regional station.
3. If the receiving condition of a recalled station is bad, press the same Preset button [12]. The unit switches to a related regional station.

TA (Traffic Announcement)

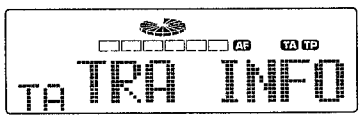
When the unit is in the TA standby mode, you can listen to traffic announcements preferentially when they start, irrespective of the function mode.

You can also tune in to TP (traffic programme) stations automatically.

●To set the TA standby mode

If you press TA button [10] when only "**TP**" is lit in the display, "**TP**" and "**TA**" light in the display and the unit is set to the TA standby mode until traffic announcements start.

When traffic announcements start, "**TRA INFO**" appears in the display, and then PS (Programme Service Name) appears.



If you press TA button [10] while traffic announcements are being broadcast, they are cancelled and the unit enters TA standby mode.

●Cancelling the TA standby mode

If you press TA button [10] when "**TP**" and "**TA**" are lit in the display, "**TA**" in the display goes off and the TA standby mode is cancelled.

●Setting the auto tuning mode for TP stations

If you press TA button [10] when only "**TP**" is lit or "**TP**" and "**TA**" are not lit in the display, "**TA**" lights and the unit automatically tunes in to TP stations.

Note:

- *The unit continues to tune in automatically if no TP station is received. Press TA button [10] again to stop auto tuning.*

Auto store function for TP stations

●Auto storing while "TA" is lit:

Only TP stations are auto stored.

* Refer to PS/AS function in radio mode.

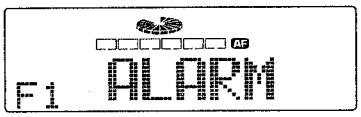
PTY

This function enables you to listen to selected programme type, irrespective of the function mode.

PTY broadcasts are not yet available in all countries.

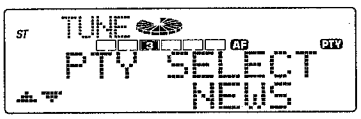
In TA standby mode, TP stations have priority over PTY broadcasting stations.

* Emergency messages interrupt all modes of operation. They can only be received from RDS stations. "**ALARM**" appears in the display and message can be heard.
  Press AF button [8] to cancel the ALARM broadcasts.



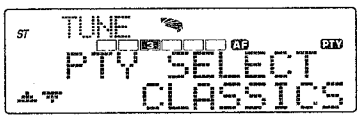
Selecting PTY

1. When you press PTY button [9], "**PTY**" lights and PTY appears in the display. The unit enters PTY select mode.



   If the control is idle for 7 seconds after the PTY select mode has been entered, the display automatically returns to radio mode display and the unit enters the PTY standby mode.

2. Select a PTY.
   Press one of Preset buttons [12] to select the desired PTY or select up or down to obtain a desired PTY using α-selector [2].



English

English

* The following stored already into the preset buttons for your convenience.

Preset No.	PTY	
	ENGLISH	(English)
1	NEWS	(News)
2	INFO	(Information)
3	POP M	(Popular music)
4	SPORT	(Sports)
5	CLASSICS	(Classic music)
6	M, O, R, M	(Middle of the Road Music)

3. Press PTY button [9] again to enter standby mode for the selected PTY.

   When a selected PTY broadcast starts, the selected PTY appears in the display.

   If you press PTY button [9] during PTY broadcasts, PTY broadcasts are temporarily cancelled and the unit enters PTY standby mode.

●Cancelling PTY standby mode

Press and hold PTY button [9] for 2 seconds or longer to turn off "**PTY**" in the display.

Preset memory of PTYs

1. Press PTY button [9] to enter PTY select mode.

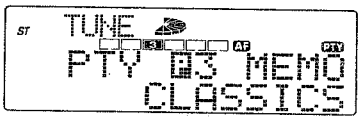
   If the control is idle for 7 seconds after the PTY select mode has been entered, the display automatically returns to radio mode display and the unit enters the PTY standby mode.

2. Select up or down to get obtain a desired PTY using α-selector [2].

   The following 15 PTYs are selectable.

PTY Display	
ENGLISH	(English)
NEWS	(News)
AFFAIRS	(Affairs)
INFO	(Information)
SPORT	(Sports)
EDUCATE	(Education)
DRAMA	(Drama)
CULTURE	(Culture)
SCIENCE	(Science)
VARIED	(Variety)
POP M	(Popular music)
ROCK M	(Rock music)
M, O, R, M	(Middle of the Road Music)
LIGHT M	(Light music)
CLASSICS	(Classic music)
OTHER M	(Other music)

3. Press and hold one of the Preset buttons 1 to 6 for 2 seconds or longer to put it into memory. After PTY is stored in memory, "**PTY MEMO**" appears in the display.



Seek tuning of PTYs

1. Press PTY button [9] to enter PTY select mode.
2. Select a PTY.
3. Select left or right using α-selector [2], when a receivable and desired PTY is found. It is automatically tuned in. If you select left or right, the PTY is sought in the direction of a higher or lower frequency channel.

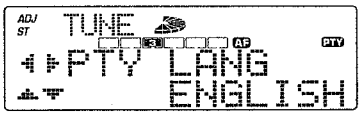
   If no stations broadcasting selected a PTY, seek tuning stops at the previous station and the unit stays in PTY standby mode.

Switching PTY display language

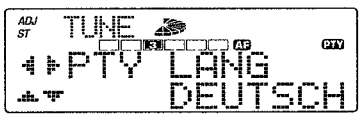
The PTY characters shown in the display can be selected from 4 languages (English, German, Swedish, French).

* The factory setting is "**ENGLISH**".

1. Press ADJ button [15].
2. Select left or right until "**PTY LANG**" is displayed using α-selector [2].



3. Select up or down to select the desired language using α-selector [2].



4. Press ADJ button [15] to return to radio mode.

Note:

- *Special characters other than alphabet characters may not be displayed properly.*

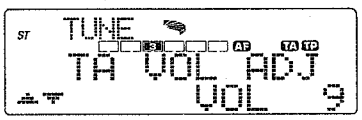
Volume setting of TA, emergency (ALARM) and PTY

You can set the volume of TA, ALARM and PTY to a desired level.

* The factory setting is "**TA VOL 9**".

1. Press and hold TA button [10] for 2 seconds or longer to enter TA VOL ADJ mode.

   If the control is idle for 7 seconds after the TA VOL ADJ mode has been entered, the display returns to radio mode display automatically.
2. Select up or down to set the volume level using α-selector [2].



   * The volume remains unchanged if the volume before the TA, ALARM and PTY broadcasts are received is higher than the previously set volume.

     If it is lower, the volume changes to the level set in TA VOL ADJ mode.
3. Press TA button [10] to complete volume setting.

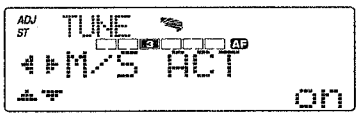
M/S (Music/Speech) function

While receiving speech programme with speech data and this function is on, this enables you to set the bass/treble to a constant level so that you can listen to the speech programme clearly.

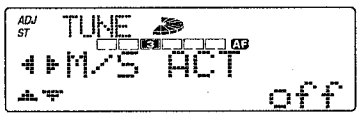
When speech is finished, the sound returns to the original bass/treble adjustment.

* The factory setting is "**off**".

1. Press ADJ button [15].
2. Select left or right until "**M/S ACT**" is displayed using α-selector [2].



3. Select up or down to turn "**on**" or "**off**" using α-selector [2].



4. Press ADJ button [15] again to return to radio mode display.

Note:

- *When you receive speech data with the M/S function set to "**on**" while a DSP/EQ such as DPH9300, DPH7300 and EQH5100 etc. is connected to this unit, the unit invalidates the DSP/EQ adjustments.*

* When receipt of speech data has finished, the sound quality returns to the original bass/treble adjustment level or the sound level set on the DSP/Equalizer.

CT (Clock Time) function

The CT function enables you to display clock time only when CT data is received.

Press DISP button [6] to switch the display to the CT indication.

* When CT data is not received, "**CT--:--**" is displayed.

Note:

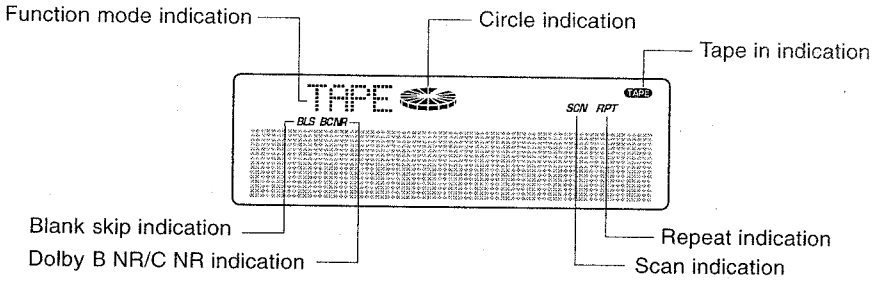
- *There are some countries and stations where clock time data are not transmitted. In some areas, the CT may not be displayed correctly.*

English

English

Tape Operations

Tape mode



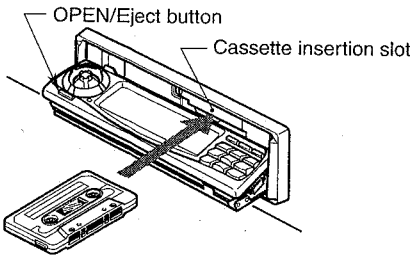
Loading a cassette

1. Press OPEN button [18] to open SLOPING CONSOLE.

Note:

- *When opening and closing SLOPING CONSOLE, be careful not to let your hand or fingers get caught in SLOPING CONSOLE.*

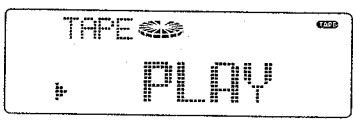
2. Insert a cassette tape into the cassette insertion slot. "**LOADING**" appears in the display, the tape enters into the slot, and play starts.



* The metal tape setting is set automatically when a metal or chrome tape (70μ sec) is loaded.

3. The SLOPING CONSOLE closes when a cassette tape is inserted.
4. Each time you press DISP button [6], the display changes in the following order:

Main→Sub→Character→Clock(CT)→Main ...



Notes:

- *Note that SLOPING CONSOLE closes immediately after the cassette tape is inserted into the cassette insertion slot.*
- *Do not put your hand, fingers or foreign object into the cassette insertion slot.*
- *If a cassette tape has already been loaded, another tape cannot be inserted. Do not insert another one forcefully.*
- *The SLOPING CONSOLE closes if no cassette tape is loaded for 30 seconds.*

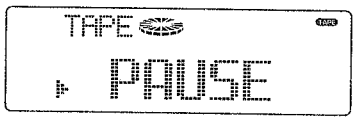
Listening to a tape already loaded

Press FUNC button [1] and select tape mode to start play. If no cassette tape is loaded, "**NO CASSETTE**" appears in the display.

* "**NO CASSETTE**" appears in the display for 4 seconds and the mode changes to the next function mode automatically.

Pausing play

1. Push in α-selector [2] to pause play. "**PAUSE**" appears in the display.



2. To resume play, push in α-selector [2] again.

Ejecting the cassette tape

1. Press Eject button [18]. The SLOPING CONSOLE opens and the cassette tape is ejected. "**EJECT**" appears in the display.
   * The radio mode is set automatically 4 seconds after Eject button [18] is pressed.

Note:

- *When opening and closing SLOPING CONSOLE, be careful not to let your hand or fingers get caught in SLOPING CONSOLE.*

2. Take out the cassette tape and press Eject button [18] to close SLOPING CONSOLE.
   * The SLOPING CONSOLE closes 30 seconds after the cassette tape is taken out.

Fast-forward/rewind (FF/REW)

●FF:

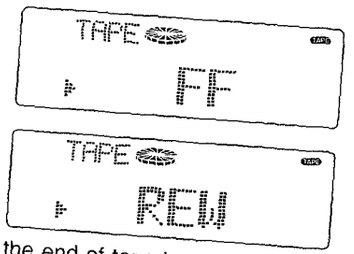
Select right α-selector [2].

●REW:

Select left α-selector [2].

●To cancel FF/REW:

Push in α-selector [2].



* When the end of tape is reached in FF or REW mode, the mode is canceled and other side of tape plays automatically.
* If you select other function mode during FF or REW mode, the selected mode is activated. However, the tape keeps on running and stops when the beginning or end of it is reached. This function is called "**monitor function**".

APC function (Auto Programme Control)

The APC function allows to start the current or next track to be played from the beginning.

●To locate the beginning of the next track (FF APC)

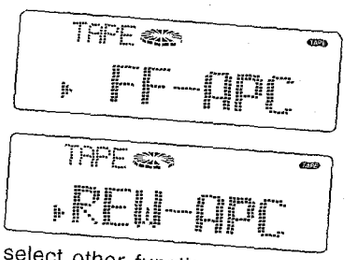
Select right α-selector [2] twice during the tape play. The tape is fast-forwarded and the next track is played.

●To locate the beginning of the current track (REW APC)

Select left α-selector [2] twice during the tape play. The tape is rewinded and the current track is played from the beginning.

●To cancel FF/REW APC and listen to the tape

Push in α-selector [2].



* If you select other function mode during APC mode, the selected mode is activated. However, the tape keeps on running and stops when the beginning of the current or next track is located. This function is called "**monitor function**".

Changing the play direction

Each time you press PROG button [11], play is changed to the other side of the tape.

* When the end of the tape is reached, the other side of the tape is played automatically. (Auto reverse)

English

English

Dolby noise reduction system

The dolby noise reduction system increases the volume level of high frequency sounds during recording and sets it back to their original level during play. This system reduces hissing noise which is typical of cassette tapes.

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
  Dolby and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

1. Each time you press Dolby NR button [9], the mode changes among B NR ON, C NR ON, and Dolby NR OFF.
2. When B NR ON or C NR ON is set, "**B NR**" or "**C NR**" lights in the display respectively. When Dolby NR OFF is set, both "**B NR**" and "**C NR**" go off from the display. Select the same mode as when the tape was recorded.

Scan play

Scan play allows the first 10 seconds of all the tracks on the cassette tape to be played.

1. Press SCN button [7]. "**SCN**" lights in the display.
2. To cancel the scan play, press SCN button [7] again. "**SCN**" goes off from the display.
   * When the tape is fast-forwarded in the scan play, "**SCN**" appears in the display.
   * When the end of the tape is reached during the scan play and the tape is switched to the other side, the scan play continues on that side.
   * If you select other function mode during the scan play, the tape stops at the beginning of the next track (APC function).

Repeat play

The repeat function allows a selected track to be played repeatedly.

1. Press RPT button [8]. "**RPT**" lights in the display.
2. To cancel repeat play, press RPT button [8] again. "**RPT**" goes off from the display and the normal play resumes.
   * While the tape is being rewinded in the repeat play, "**RPT**" appears in the display.

Blank skip function

The blank skip function allows the play to be skipped to the beginning of the next recorded track when there is a blank section of 12 seconds or longer on the tape.

1. Press and hold BLS button [8] for 2 seconds or longer. "**BLS**" lights in the display.
2. To cancel blank skip, press and hold BLS button [8] again for 2 seconds or longer. "**BLS**" goes off from the display and the normal play resumes.
   * While the tape is being fast-forwarded in the blank skip, "**BLS**" appears in the display.

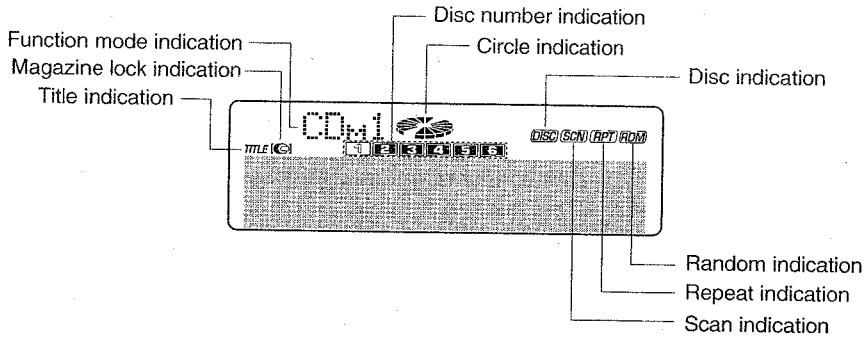
Notes:

The APC, Scan play, Repeat play, Blank skip may not work properly with tapes of the following qualities:

- *Tapes on which the recording level is too low.*
- *Tapes on which there is much noise between selections.*
- *Tapes on which there are long pauses in the middle of selections.*
- *Tapes on which there are less than 4 seconds of blank space between selections.*

CD Changer Operations

CD changer mode

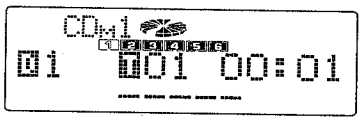


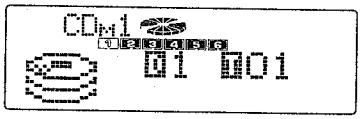
English

Listening to a CD in the CD changer

When a separately sold CD changer is connected to the ARX9470R/ARX9470RW, you can listen to CD.

1. Press FUNC button [1] and select CD changer mode to start play.
   * The CD Nos. of magazine where CDs are loaded light in the display.
2. Each time you press DISP button [6], the display changes in the following order:
   Main→Sub→Character→Clock(CT)→Main ...





3. When a magazine is not set in the CD changer, "**NO MAGAZINE**" appears in the display.
   * If a magazine is set while "**NO MAGAZINE**" is being displayed, "**LOADING**" appears in the display for a moment, "**PAUSE**" appears in the display, and the operation pauses for a moment.
4. When a CD is not set in the magazine, "**NO DISC**" appears in the display.
   * Insert a CD into the magazine and set the magazine in the CD changer.

⚠ CAUTION

CD-ROMs cannot be played with CD changer.

Note:

- *When a CD changer is connected, be sure to turn off the main unit and turn it again.*

Pausing play

1. Push in α-selector [2] to pause play. "**PAUSE**" appears in the display.

2. To resume play, push in α-selector [2] again.

Selecting a CD

Press Direct button [12] to select a CD. The CD No. of magazine is the same as that of the Direct button.

* Only the Direct buttons corresponding to the CD Nos. of the magazine where CDs are loaded can be selected.

Selecting a track

● Next track:
Select right α-selector [2].

● Current track:
Select left α-selector [2].

● Previous track:
Select left α-selector [2], do the same again.

* Each time you select left or right using α-selector [2], the track is skipped accordingly.

English

Fast-forward/fast-backward (FF/FB)

● Fast-forward:
Press right and hold α-selector [2] for 1 second or longer.

● Fast-backward:
Press left and hold α-selector [2] for 1 second or longer.

* Press left or right and hold α-selector [2] for 3 seconds or longer to increase the speed of fast-forwarding or fast-backwarding.

Selecting a magazine

● Next magazine:
Press MAG button [11].

The selected magazine No. appears in the display.

Magazine lock

The magazine lock allows only the CDs in the locked magazine to be played.

1. Press and hold MAG button [11] for 2 seconds or longer. "[(C)]" lights in the display.
2. To cancel the magazine lock, press and hold MAG button [11] again for 2 seconds or longer. "[(C)]" goes off from the display.
   * Even when the magazine is locked, pressing MAG button [11] switches magazine. The new one is locked.

Note:
- *These functions ("**Selecting a magazine**" and "**Magazine lock**") are available only when a 12 or 18 disc CD changer is connected.*

Scan play

The scan play allows the first 10 seconds of all the tracks on the CD to be played.

* The scan play is useful when you want to select a desired track.

1. Press SCN button [7]. "**SCN**" lights in the display.
2. To cancel the scan play, press SCN button [7] again. "**SCN**" goes off from the display and the normal play resumes.

Disc scan play

The disc scan play allows the first 10 seconds of the first tracks on all the CDs in the CD changer to be played.

* The disc scan play is useful when you want to select a desirable CD.

1. Press and hold SCN button [7] for 2 seconds or longer. "**DISC**" and "**SCN**" light in the display.
2. To cancel the disc scan play, press SCN button [7] again. "**DISC**" and "**SCN**" go off from the display and the normal play resumes.

Repeat play

The repeat play allows the selected track to be played repeatedly.

1. Press RPT button [8]. "**RPT**" lights in the display.
2. To cancel the repeat play, press RPT button [8] again. "**RPT**" goes off from the display and the normal play resumes.

Disc repeat play

The disc repeat play allows the current CD to be played repeatedly.

1. Press and hold RPT button [8] for 2 seconds or longer. "**DISC**" and "**RPT**" light in the display.
2. To cancel the disc repeat play, press RPT button [8] again. "**DISC**" and "**RPT**" go off from the display and the normal play resumes.

Random play

The random play allows all the tracks on the current CD to be played randomly.

1. Press RDM button [9]. "**RDM**" lights in the display.
2. To cancel the random play, press RDM button [9] again. "**RDM**" goes off from the display and the normal play resumes.

Disc random play

The disc random play allows all the tracks on all the CDs in the CD changer to be played randomly.

1. Press and hold RDM button [9] for 2 seconds or longer. "**DISC**" and "**RDM**" light in the display.
2. To cancel the disc random play, press RDM button [9] again. "**DISC**" and "**RDM**" go off from the display and the normal play resumes.

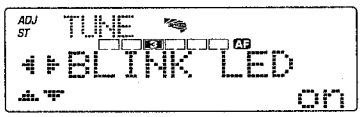
Other Handy Functions

Anti-theft indicator

The red Anti-Theft Indicator is a mean of preventing theft. This indicator can be flashed when DCP is removed from the unit.

* The factory setting is "**off**".

1. Press ADJ button [15].
2. Select left or right to until "**BLINK LED**" is displayed using α-selector [2].



3. Select up or down to select "**on**" or "**off**" using α-selector [2].
4. Press ADJ button [15] to return to the previous display.

Dimmer function

This function dims the display illumination when the car's instrument panel illumination is turned on or when inside the car gets dark at night.

* The dimmer level of the display illumination can be set by "**Setting the dimmer level**".

Each time you press No.1 of the Direct buttons [12] while pressing and holding DISP button [6], the dimmer toggles between "**auto**", "**off**" and "**on**".

* The factory setting is "**auto**".

●auto:

The dimmer is turned on according to the brightness inside the car.

●on:

The dimmer is turned on when the car's instrument panel illumination is turned on.

●off:

The dimmer is turned off and the display is illuminated at the usual level.

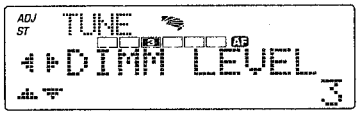
* When the dimmer level is set to "**on**", connect the illumination lead of the unit and that of the car.

Setting the dimmer level

The dimmer level of the display illumination can be set.

* The dimmer level can be set from 1 to 5 and the factory setting is 3.

1. Press ADJ button [15].
2. Select left or right to select until "**DIMM LEVEL**" is displayed using α-selector [2].



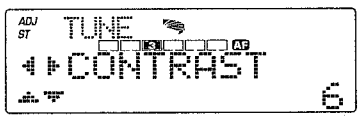
3. Select up or down to set a level from 1 to 5 using α-selector [2].
4. Press ADJ button [15] to return to the previous mode display.

Contrast setting

The contrast of the display can be set.

* The contrast level can be set from 1 to 11 and the factory setting is 6.

1. Press ADJ button [15].
2. Select left or right to select until "**CONTRAST**" is displayed using α-selector [2].



3. Select up or down to set a level from 1 to 11 using α-selector [2].
4. Press ADJ button [15] to return to the previous mode display.

English

English

Cellular input

When the unit is connected to a cellular telephone via cable sold separately, the voice from the telephone can be heard from the speaker of unit.

Each time you press No.5 of the Direct buttons [12] while holding down BAND button [11], the cellular input toggles between "**TEL SP-R**", "**TEL SP-L**", "**TEL MUTE**" and "**TEL off**".

* The factory setting is "**TEL off**".

●TEL SP-R:
Even if the power is turned on or off to the main unit, sound is heard from the front right speaker.

●TEL SP-L:
Even if the power is turned on or off to the main unit, sound is heard from the front left speaker.

●TEL MUTE:
The sound of the unit is muted when the telephone is used.

●TEL off:
The sound of the unit is not muted when the telephone is used.

Note:

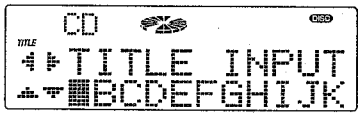
- *This function is available only when the phone mute lead of the unit is connected to the specified lead of the cellular telephone.*

Entering titles

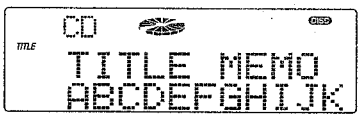
Titles can be given to CDs.

* Up to 100 titles can be entered.

1. Play the CD to which you want to give a title in the CD changer and press TITLE button [14].



2. Select left or right to move the cursor using α-selector [2].
   * Up to 11 characters can be entered.
3. Press DISP button [6] to select a character list used to enter characters. Each time you press this button, the character list changes as follows:
   Capital letters → Numbers → Umlauts and accented letters → Small letters → Symbols → Capital letters...
4. Select up or down to select the characters using α-selector [2].
5. Repeat steps 2, 3 and 4 to enter a title.
   * When more than the specified number of titles are entered, "**TITLE FULL**" appears in the display.
6. Push in α-selector [2] for 2 seconds or longer to store the title. The previous mode display returns after the title is stored.



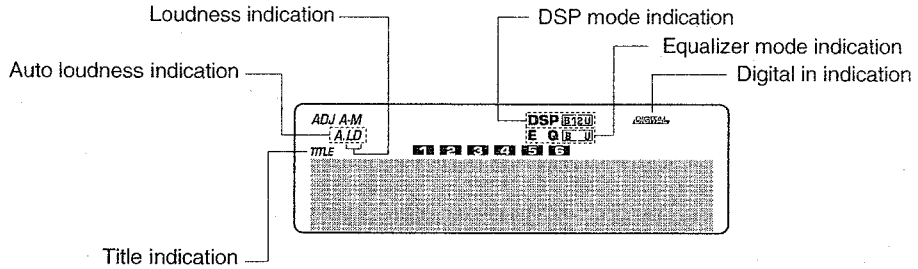
Clearing titles

1. Select the CD changer mode and press and holding TITLE button [14] for 2 seconds or longer.

2. Select up or down to select a title to be cleared using α-selector [2].
3. Push in α-selector [2] for 2 seconds or longer to clear the title. The next title appears. If you want to clear the next title too, repeat steps 2 and 3.
   * When all the stored titles are cleared, "**NO TITLE**" appears in the display.
4. After clearing the title, press TITLE button [14] to return to the previous mode display.

DSP and Equalizer Operations

DSP and equalizer mode



English

When a separately sold expanded graphic digital sound processor (DSP) or expanded graphic equalizer (EQ) is connected, the functions described below can be controlled from the ARX9470R/ARX9470RW.

* If you buy the DPH9300 or DPH9100, or DPH7300 or DPH7100, the function and operation method are the same. In this section, DPH9300 and DPH7300 will be used to explain the operation.

Fine-adjustment of the listening position

(when the DPH9300 or DPH7300 is connected)

The time required from when the sound leaves the speaker until it reaches you can be fine-adjusted to create a natural sound field, no matter what seat you are sitting in.

Numerous preset sound fields

(when the DPH9300 or DPH7300 is connected)

The most common sound fields are already stored in the memory. In addition, 6 other sound field settings adjusted by the user can also be stored in the memory (only when the DPH9300 is connected).

Six preset equalizer settings

(when the DPH9300, DPH7300 or EQH5100 is connected)

Six equalizer settings are preset, offering a choice of the settings for various types of music. In addition, 6 other settings adjusted by the user can also be stored in the memory.

Giving titles

(only when the DPH9300 is connected)

Titles can be given to the user-adjusted sound fields and equalizer settings and displayed when they are selected.

DSP Functions

Turning the DSP effect on and off

Press and hold DSP button [16] for 2 seconds or longer to turn the DSP effect on and off.

* When the DSP effect is on, "**DSP B1**", "**DSP B2**" (only when the DPH9300 is connected) or "**DSP U**" lights in the display.

Fine-adjusting the listening position

1. Press A-M button [13] to set the listening position adjustment display.
2. Push in α-selector [2] to select the position to be adjusted. The position switches as follows each time α-selector [2] is pressed:
   "**FULL SEAT**" → "**FRONT-R**" → "**FRONT-L**" → "**FRONT**" → "**REAR**" → "**PASS**" → "**FULL SEAT**" ...
3. Select up or down to adjust the fader using α-selector [2].
4. Select left or right to adjust the balance using α-selector [2].

Selecting the DSP sound field

1. Press FUNC button [1] to select the desired mode.
2. Press DSP button [16] so that "**DSP**" flashes in the display.
3. Press BAND button [11] and select the group including the desired sound field. The group changes as follows each time BAND button [11] is pressed:
   "**DSP B1**" (BASIC 1) → "**DSP B2**" (BASIC 2) → "**DSP U**"(USER) → "**DSP B1**"(BASIC 1) ...
   * When the DPH7300 is connected, only "**DSP BASIC**" can be selected.
4. Use Direct buttons [12] to select the desired sound field.

DSP and Equalizer Operations

●Sound fields

<DSP BASIC 1 (when the DPH9300 or DPH7300 is connected)>

B1-1. HALL: Sound of a large concert hall (𝄞)

B1-2. CHURCH: Sound of a church with a very high ceiling (𝄞)

B1-3. STADIUM: Sound of a large stadium with no ceiling or walls (♪)

B1-4. LIVEHOUSE: Sound of a live performance hall, somewhat larger than a jazz club (♪)

B1-5. DISCO: Sound of a disco with strong bass (♪)

B1-6. JAZZCLUB: Sound of a jazz club with a low ceiling (♪)

<DSP BASIC 2 (only when the DPH9300 is connected)>

B2-1. DOME: Sound of an indoor sports arena (𝄞)

B2-2. CHAMBER: Sound of a large hall in a palace (𝄞)

B2-3. PARK: Sound of a spacious outdoor area (♪)

B2-4. THEATRE: Sound of a movie or drama theatre (♪)

B2-5. STUDIO: Sound of a listening room in a home (♪)

B2-6. BGM: Sound with the vocals cut (★)

* (𝄞) - Reverberation type sound fields
  (♪) - Early reflection type sound fields
  (★) - "**BGM**" (background music) type sound field

Editing DSP sound field settings

1. Select the preset sound field to sense as a base.
2. Press DSP button [16]. "**DSP**" flashes in the display.
3. Press ADJ button [15].
4. Select up or down using α-selector [2] to select "**DSP EDIT**", then push in α-selector [2].
5. Select left or right using α-selector [2] to select the parameter to be adjusted.
6. Select up or down to adjust the setting using α-selector [2].
7. To store a setting in the memory, press and hold one of Direct buttons [12] for 2 seconds or longer. (only when the DPH9300 is connected)
8. Press ADJ button [15].

●Parameters which can be adjusted in the "DSP EDIT" mode

- **EFFECT**: Percentage of reflected sound (0% to 100%)
- **INITIAL DLY**: Sense of distance between sound source and walls (1 ms to 100 ms)
- **REVERBTIME**: Length of reverberations (0.3 s to 10.0 s)
- **ROOMSIZE**: Sense of expansion (0.1 to 4.0)
- **HIGH**: Sense of high frequencies in reverberations (0.1 to 1.0)
- **LIVENESS**: Sense of dynamism (0 to10)

* For details on the parameters, refer to the DSP unit's operating instructions.
* When the DPH7300 is connected, only the "**EFFECT**" parameter can be edited.
* For some sound fields, not all the parameters can be adjusted.

- **For reverberation type sound fields (𝄞)**:
  The "**ROOMSIZE**" and "**LIVENESS**" parameters cannot be adjusted.
- **For early reflection type sound fields (♪)**:
  The "**REVERBTIME**" and "**HIGH**" parameters cannot be adjusted.
- **For the BGM type sound field (★)**:
  Only the "**EFFECT**" parameter can be adjusted.

Giving titles to DSP and equalizer settings *(only when the DPH9300 is connected)*

1. Press DSP [16] or EQ [17] button so that "**DSP**" or "**EQ**" flashes in the display.
2. Press BAND button [11] to select "**DSP USER**" or "**EQ USER**".
3. Use Direct buttons [12] to select the number of the user setting (U-1 to U-6) to which you want to give a title.
4. Press TITLE button [14].
5. Select left or right to select the cursor position, then select up or down to select and input the characters using α-selector [2].
   * You can change the input characters type by pressing DISP button [6].
   * Up to 11 characters can be set.
6. Push in α-selector [2] for 2 seconds or longer to store the title in the memory.

Turning the auto loudness function on and off

(only when the DPH9300 is connected)

Press and hold LOUD button [13] for 2 seconds or longer. "**A. LD**" lights in the display, and the auto loudness function is turned on. Press and hold LOUD button [13] again for 2 seconds or longer to turn the auto loudness function off.

●Adjusting the auto loudness function

The amount of compression can be adjusted (between 0 to 10) without changing the loudness.

1. Press DSP button [16] so that "**DSP**" flashes in the display.
2. Press ADJ button [15].
3. Select up or down using α-selector [2] to select "**A. LD ADJ**", then push in α-selector [2].
4. Select up or down to adjust the setting using α-selector [2].
5. Press ADJ button [15].

Equalizer Functions

Turning the equalizer effect on and off

Press and hold EQ button [17] for 2 seconds or longer to turn the equalizer effect on and off. When the equalizer effect is on, "**EQ B**" or "**EQ U**" lights in the display.

Selecting the equalizer setting

1. Press FUNC button [1] to select the desired mode.
2. Press EQ button [17] so that "**EQ**" flashes in the display.
3. Press BAND button [11] and select the group including the desired sound. The group changes as follows each time BAND button [11] is pressed:

   "**EQ B**" (BASIC) ➜ "**EQ U**" (USER) ➜ "**EQ B**" (BASIC) ...
4. Use Direct buttons [12] to select the desired equalizer setting.

<Equalizer settings>

B-1. BASS BOOST: Low frequencies emphasized

B-2. HIGH BOOST: Medium and high frequencies emphasized

B-3. ACOUSTICAL: Medium frequencies (vocals) emphasized

B-4. IMPACT: Low and high frequencies emphasized

B-5. SMOOTH: Soft, relaxed sound

B-6. FLAT: The original sound

Editing the equalizer settings

1. Select the preset equalizer setting to serve as a base.
2. Press EQ button [17] so that "**EQ**" flashes in the display.
3. Press ADJ button [15].
4. Select up or down to select the desired adjustment using α-selector [2], then push in α-selector [2].
5. When "**EQ EDIT**", "**EQ MIN FREQ**", "**SUB WOOFER**" or "**P. EQ**" has been selected, select left or right using α-selector [2] to select the parameter to be adjusted.
6. Select up or down to adjust the setting using α-selector [2].

7. To store a setting in the memory, press and hold one of Direct buttons [12] for 2 seconds or longer.
8. Press ADJ button [15].
   * For details on the parameters, refer to the equalizer manual.

● Equalizer adjustments

<EQ EDIT>

Use this to adjust the levels of the various frequencies.

<EQ MIN FRQ (when the DPH9300 or DPH7300 is connected)>

This function allows you to switch the minimum adjustment frequency between 30 Hz and 50 Hz.

<Parameters which can be adjusted in the "**SUB WOOFER**" mode>

1. **STEREO/MONO**: Switch this according to the number of speakers being used. (OFF, MONO or STEREO)
2. **WOOFER VOL**: Sets the woofer's volume. (0 to 14)
3. **LPF**: Sets the low-pass filter's frequency. (50 Hz, 80 Hz or 120 Hz)
4. **LPF SLOPE**: Sets the low-pass filter's slope. (12 dB/oct, 18 dB/oct or 24 dB/oct)
5. **HPF**: Sets the high-pass filter's frequency. (Through - 50 Hz, 80 Hz or 120 Hz)
6. **HPF SLOPE**: Sets the high-pass filter's slope. (12 dB/oct, 18 dB/oct or 24 dB/oct)
7. **TEST TONE**: Used for testing the speaker wiring.
   * When the "**STEREO/MONO**" setting is turned "**OFF**", parameters 2, 3 and 4 and parameter 7 "**WOOFER-L**" and "**WOOFER-R**" cannot be adjusted.
   * Parameters 4 and 6 can only be adjusted when the DPH9300 is connected.
   * Parameter 7 cannot be adjusted when the EQH5100 is connected.

<Parameters which can be adjusted in the "**P. EQ**" mode (only when the DPH9300 is connected)>

- **P. EQ F/R**: Switches between the front and rear. (OFF, REAR or FRONT)
- **F PRESET**: Selects one of 6 types of parameters according to car type. (TYPE 1 to TYPE 6)
- **R PRESET**: Selects one of 7 types of parameters according to car type. (TYPE 1 to TYPE 7)
- **BAND**: Selects the band to be adjusted. (1 to 4: 1 and 2 are for low frequencies, 3 and 4 for medium and high frequencies)
- **FREQUENCY**: Selects the centre frequency for the adjustment. (1 and 2: 20 Hz to 500 Hz, 3 and 4: 630 Hz to 20 kHz)
- **GAIN**: Adjusts the level. (–12 dB to +12 dB)
- **Q**: Adjusts the sharpness of the frequency curve. (1, 3, 5, 7 and 20)

* Parameters 2 to 7 cannot be adjusted when the "**P. EQ F/R**" parameter is turned off.

<PINK NOISE>

Pink noise (adjustment sounds) can be emitted in the order shown below by pressing and holding DISP button [6] for 2 seconds or longer while in the parametric equalizer adjustment mode.

Front ➜ Rear ➜ All ➜ Off ➜ Front ...

<SURROUND (only when the EQH5100 is connected)>

The surround effect can be turned on and off.

* For details on the adjustment items see the DSP or equalizer manual.

Note:

- *When the DSP979E or 900SEQ is connected, the corresponding mode must be set.*

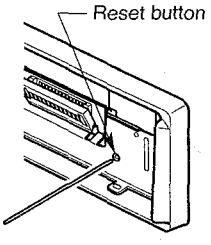
<Setting the DSP mode>

1. Set the DSP unit's volume to the minimum and the main unit's volume to the maximum.
2. Press Direct button [12] number "**2**" while holding in DISP button [6]. "**DSP connect**" appears in the display, and the DSP mode is set.
3. To cancel the DSP mode, once again press Direct button [12] number "**2**" while holding in DISP button [6]. "**DSP no conn**" appears in the display, and the DSP mode is cancelled.

<Setting the equalizer mode>

1. Press Direct button [12] number "**3**" while holding in DISP button [6]. "**EQ connect**" appears in the display, and the equalizer mode is set.
2. To cancel the equalizer mode, once again press Direct button [12] number "**3**" while holding in DISP button [6]. "**EQ no conn**" appears in the display, and the equalizer mode is cancelled.
   * For operations, refer to the DSP or equalizer manual.

8. IN CASE OF DIFFICULTY

Problem	Cause	Solution
Power does not turn on. (No sound is produced.)	Fuse is blown.	Replace with a fuse of the same amperage. If the fuse blows again, consult your store of purchase.
	Incorrect wiring.	Consult your store of purchase.
Sound quality is poor.	Playback head is dirty.	Use a cleaning tape, etc., to clean the head.
	Dolby NR button is not pressed.	When listening to a tape recorded with Dolby NR, press the Dolby NR button and select B NR or C NR.
Nothing happens when buttons are pressed. Display is not accurate.	Microprocessor has malfunctioned due to noise, etc.	Turn off the power, then press the DCP release button and remove the DCP. Press the reset button for about 2 seconds with a thin rod. 
	DCP or main unit connectors are dirty.	Wipe the dirt off with a soft cloth moistened with cleaning alcohol.
DSP or equalizer does not operate.	Microprocessor has malfunctioned due to noise, etc.	Press Direct button 1 (for more than 2 seconds) while holding in the DSP button, then turn the power back on.

English

9. ERROR DISPLAYS

If an error occurs, one of the following displays is displayed.
Take the measures described below to eliminate the problem.

Error Display	Cause	Measure
TAPE ERROR1	Tape cannot be played due to defective tape such as cut tape.	Eject the tape then replace it with a new one.
TAPE ERROR2	Tape is caught and cannot be played.	Remove the caught or wound tape.
TAPE ERROR4	Tape mode cannot be detected.	This is a failure of tape mechanism and consult your store of purchase.
TAPE ERROR8	Tape is caught and cannot be ejected.	Eliminate the reason for whitch the tape is caught.
CDAC ERROR2	A CD inside the CD changer is not loaded.	This is a failure of CD changer's mechanism and consult your store of purchase.
CDAC ERROR3	A CD inside the CD changer cannot be played due to scratches, etc.	Replace with a non-scratched, non-warped-disc.
CDAC ERROR6	A CD inside the CD changer cannot be played because it is loaded upside-down.	Eject the disc then reload it properly.
EQ ERROR99	Communication error between main unit and expanded DSP/EQ.	Connect the expanded DSP/EQ connecting cable securely.

If an error display other than the ones described above appears, press the reset button. If the problem persists, turn off the power and consult your store of purchase.